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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/668,071	09/22/2000	Kouji Fujiwara	49940(868)	1421

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EXAMINER

NGUYEN, HAU H

ART UNIT PAPER NUMBER

2676

DATE MAILED: 03/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/668,071

Applicant(s)

FUJIWARA ET AL.

Examiner

Hau H Nguyen

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 December 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

((a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 1 is rejected under 35 U.S.C. 102(a) as being anticipated by Prinsen (U.S. Patent No. 5,825,347).

Referring to claim 1, Prinsen teaches an electronic image apparatus, wherein the electronic image displayed on display screen 50 (image display device) of FIG. 5 is generated by a screen saver program. The computer system 30 (as shown in FIG. 3) (a driving mechanism) can detect the passage of a predetermined length of time in which no input by the user is detected. When this time has elapsed, the electronic image shown in FIG. 5 replaces the pre-existing image on the display screen 50 (col. 5, lines 28-35). Thus, the displayed image is shut off for a constant period.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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4. Claims 1 and 5 are rejected under 35 U.S.C. 102(e) as being anticipate by Bell (U.S. Patent No. 6,023,255).

Referring to claim 1, as shown in Fig. 4, Bell teaches a display image which generates the moving image 4 using a commercially available traveling-message display 7 comprising a boxed array 7" high by 80" wide, of light-emitting diodes (LEDs 19) 108 (a driving mechanism) arranged in a regular grid pattern and circuitry (not shown) for presenting word images that travel across the array of LEDs 19 (col. 3, lines 58-64). Bell further teaches that the modulation may be done by a programmed computer or by a circuit. The modulation may be done between on and off states or among more than two levels of intensity or between different colors (col. 2, lines 4-8). Thus, images are shut off for a constant period.

In regard to claim 5, as shown in fig. 5, Bell teaches the moving image on a strip of flexible material that is formed into a continuous belt and mounted on pulleys or sprocket rollers 10. A motor 11 connected to one of the pulleys 10 drives the belt 9 to move at a constant speed (col. 4, lines 16-23).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2-4, 7-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prinsen (U.S. Patent No. 5,825,347).

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In regard to claim 2-4, Prinsen teaches the display device 12 (Fig. 1) can also be liquid-crystal displays (LCDs) (col. 3, lines 30-32). As is well known in the art, LCD can be of transmission-type or reflection-type. As cited above, displayed image is replaced for a constant period, and thus in between the replacing of images, the liquid crystal display intercepts backlight. Therefore, it would have been obvious to one skilled in the art to utilize the LCD either of transmission-type or reflection-type to the display system as taught by Prinsen in order to either use backlight (for transmission-type LCD), thus bring out high brightness and contrast or without backlight (for reflection-type LCD), thus reduces cost.

In regard to claims 8, 10 and 11, since the display device as taught by Prinsen can be a liquid crystal display, as is well known in the art, the liquid crystal acts like a shutter, blocking or allowing light to pass depending on whether voltage is on or off.

Referring to claims 7 and 9, although Prinsen does not teach the drive mechanism carry out the shutting off of the image in synchronization with the vertical sync signal or the shutting off of the image between frames, Prinsen does teach the shutting off of the image for a constant period, it is implied that the on and off of the displayed image should be in synchronization with the vertical sync signal or between frames because an image is generated on a display device based on the generation of light beam. Light beam starts from the top left corner to the bottom right corner to make up a frame. A vertical sync signal is generated at the end of each frame.

As for claim 12, as is common in the art, LCD can be of transmission-type or reflection-type.

7. Claims 6 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prinsen (U.S. Patent No. 5,825,347) in view of Faris (U.S. Patent No. 5,828,427).

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Referring to claims 6 and 13, as applied to claims 1 and 9 above, Prinsen teaches all the limitations of claims 6 and 13, except that the liquid crystal display device is a projection device for magnifying and projecting light.

However, liquid crystal display device used in projection device is common in the art as described in U.S. Patent No. 5,828,427 to Faris. Faris teaches a flat panel display panel having direct and projection viewing modes of operation, and an electro-optical backlighting panel having a light emission state in which light is emitted from the electro-optical panel during the direct viewing mode of operation, and a light transmission state in which externally generated light is permitted to pass through the electro-optical panel without substantial scattering during the projection viewing mode of operation (col. 3, lines 9-17).

Therefore, it would have been obvious to one skilled in the art to utilize the LCD device as taught by Faris in combination with the display device as taught by Prinsen in order to project images on large viewing surfaces (col. 6, lines 22-25).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892 form.

Eric S. Raymond ("Guide to X386/XFree86 Video Timing", Section "How Video Display Works") teaches how a video image is generated on a display device.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hau H. Nguyen whose telephone number is: 703-305-4104. The examiner can normally be reached on MON-FRI from 8:30-5:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella can be reached on 703-308-6829.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D. C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered response should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

H. Nguyen

03/03/2003



**MATTHEW C. BELLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600**